WELCOA
HEALTH BULLETINS

ToYourHealth

WELCOA'S ONLINE GENERAL WELLNESS BULLETIN

OBESITY & CANCER

Obesity is a condition in which a person has an unhealthy amount and/or distribution of body fat.

To measure obesity, researchers commonly use a scale known as the body mass index (BMI). BMI is calculated by dividing a person's weight (in kilograms) by their height (in meters) squared (commonly expressed as kg/m2). BMI provides a more accurate measure of obesity than weight alone, and for most people it is a fairly good (although indirect) indicator of body fatness.

Other measurements that reflect the distribution of body fat—that is, whether more fat is carried around the hips or the abdomen—are increasingly being used along with BMI as indicators of obesity and disease risks. These measurements include waist circumference and the waist-to-hip ratio (the waist circumference divided by the hip circumference).

Compared with people of normal weight, those who are overweight or obese are at greater risk for many diseases, including diabetes, high blood pressure, cardiovascular disease, stroke, and many cancers. Extreme or severe obesity is also associated with an increased death rate; heart disease, cancer, and diabetes are responsible for most of the excess deaths.

HOW COMMON IS OVERWEIGHT OR OBESITY?

Results from the National Health and Nutrition Examination Survey (NHANES) showed that in 2011–2014, nearly 70% of U.S. adults age 20 years or older were overweight or obese and more than one-third (36.5%) were obese. In 1988–1994, by contrast, only 56% of adults aged 20 years or older were overweight or obese.

WHAT IS KNOWN ABOUT THE RELATIONSHIP BETWEEN OBESITY AND CANCER?

Nearly all of the evidence linking obesity to cancer risk comes from large cohort studies, a type of observational study. However, data from observational studies can be difficult to interpret and cannot definitively establish that obesity causes cancer. That is because obese or overweight people may differ from lean people in ways other than their body fat, and it is possible that these other differences—

rather than their body fat—are what explains their different cancer risk.

Despite the limitations of the study designs, there is consistent evidence that higher amounts of body fat are associated with increased risks of a number of cancers, including endometrial, gastric, liver, kidney, pancreatic and colorectal cancers.

DOES AVOIDING WEIGHT GAIN OR LOSING WEIGHT DECREASE THE RISK OF CANCER?

Most of the data about whether avoiding weight gain or losing weight reduces cancer risk comes from cohort and case-control studies. As with observational studies of obesity and cancer risk, these studies can be difficult to interpret because people who lose weight or avoid weight gain may differ in other ways from people who do not.

Nevertheless, when the evidence from multiple observational studies is consistent, the association is more likely to be real. Many observational studies have provided consistent evidence that people who have lower weight gain during adulthood have lower risks of colon cancer, kidney cancer, and—for postmenopausal women—breast, endometrial, and ovarian cancers.

Fewer studies have examined possible associations between weight loss and cancer risk. Some of these have found decreased risks of breast, endometrial, colon, and prostate cancers among people who have lost weight. However, most of these studies were not able to evaluate whether the weight loss was intentional or unintentional (and possibly related to underlying health problems).

Stronger evidence for a relationship between weight loss and cancer risk comes from studies of people who have undergone bariatric surgery (surgery performed on the stomach or intestines to induce weight loss). Obese people who have bariatric surgery appear to have lower risks of obesity-related cancers than obese people who do not have bariatric surgery.